CLAIMS

1. A method of producing a forage, biomass, composite materials, pulp or paper comprising:

a) planting mimosa to produce mimosa plants; and

b) harvesting said plants to produce a forage or to be used in the production of one member of the group consisting of: biomass, composite materials, pulp and paper.

2. The forage of claim 1, wherein said forage is for livestock feed or deer.

3. The method of claim 1 wherein said planting is planting of mimosa seed.

4. The method of claim 1 wherein said planting consists of plants produced by tissue culture.

5. The method of claim 1, wherein said planting consists of planting stem cuttings.

6. The method of claim 3, wherein said seed is scarified prior to planting.

7. The method of claim 6, wherein said scarification is obtained with hot water, or mechanically scratching the seed coat in order to induce permeability.

8. The process of claim 3, wherein the seed is inoculated with rhizobium bacteria prior to planting in order to induce nodulation and nitrogen fixation.

9. The method of claim 3, wherein said seed is planted by hand.

10. The method of claim 2, wherein said seed is planted with a mechanical planter.

11. The method of claim 9, wherein said seed is planted in containers such as pots, and following germination, mimosa plants are transplanted into deer food plots or commercial fields.

12. The method of claim 11, wherein said mimosa plants are less than 1 foot tall when they are transplanted.

13. The method of claim 11, wherein said mimosa plants are between about 1 foot and about 5 feet tall when they are transplanted.

14. The method of claim 9, wherein said mimosa plants are between about 3 feet and about 5 feet tall when they are transplanted.

15. The method of claim 11, wherein said plants are over 5 feet tall when they are transplanted.

16. The method of claim 10 wherein said seed is planted in rows alternating from about 2 feet apart to about 6 feet apart.

17. The method of claim 10, wherein said seed is planted in rows alternating to more than 6 feet apart.

18. The method of claim 10, wherein said mimosa is planted in solid stands.

19. The method of claim 10, wherein said mimosa is planted in strips, with strips of other typical pasture forages between the mimosa strips.

20. The method of claim 10, wherein said mimosa is planted in clumps or patches, with typical pasture forages between the clumps.

21. The method of claim 3, wherein a selective herbicide such as Strongarm or Pursuit is used to control weeds during establishment of mimosa plants.

22. The method of claim 1, wherein domestic livestock such as cattle, sheep or goats are allowed continuous access to an area following successful establishment of mimosa.

23. The method of claim 1, wherein said mimosa plants are harvested and chopped mechanically to make silage for livestock.

24. The method of claim 1, wherein mimosa biomass is harvested with or without prior removal of foliage by domestic livestock, and processed into bioenergy.

25. The method of claim 24, wherein said mimosa is grown between about 12 months to about 36 months before biomass is harvested.

26. The method of claim 24, wherein said mimosa is grown more than 36 months before biomass is harvested.

27. The method of claim 24, wherein the bioenergy produced is a liquid fuel, such as ethanol, methanol or mixed alcohols.

28. The method of claim 27, wherein the biomass conversion method involves acid hydrolysis and fermentation.

29. The method of claim 27, wherein the biomass conversion method involves enzyme hydrolysis and fermentation.

30. The method of claim 27, wherein the biomass conversion process involves gasification and fermentation.

31. The method of claim 27, wherein the biomass conversion process involves gasification and catalytic conversion to a liquid fuel.

32. The method of claim 24, wherein the bioenergy produced is electricity.

33. The process of claim 32, wherein the electricity is produced by co-firing the mimosa biomass with coal.

34. The method of claim 32, wherein the electricity is produced by gasifying the mimosa biomass in a gasifier, and using syngas from the gasifier to power steam turbines.

35. The method of claim 32, wherein the electricity is produced by gasifying the mimosa biomass and using the syngas from the gasifier to power gas turbines.

36. The method of claim 32, wherein the electricity is produced by gasifying the mimosa biomass, and using the syngas from the gasifier to power an internal combustion engine.

37. The method of claim 1, wherein said mimosa wood is harvested and used to manufacture composite materials.

38. The method of claim 37, wherein the composite materials are composite panels, such as particle board, medium density fiberboard, or oriented strand board.

39. The method of claim 37, wherein the binder for the mimosa particles in the composite material is a plastic, or similar compound.

40. The method of claim 1, wherein mimosa wood is used to produce pulp and paper with or without prior removal of foliage by domestic livestock, and with or without debarking the mimosa prior to pulping.

41. The method of claim 40, wherein said mimosa wood is used alone to produce pulp and paper.

42. The method of claim 40, wherein said mimosa wood is blended with typical hardwood or softwood, prior to pulping.

43. The method of claim 40, wherein pulp from mimosa and pulp from other raw materials are blended after pulping to produce paper.

44. The method of claim 40, wherein said mimosa wood is subject to chemical pulping.

45. The method of claim 40, wherein said mimosa wood is subject to mechanical pulping.

46. The method of claim 40, wherein said mimosa wood is subject to chemi-mechanical pulping.

47. The method of claim 40, wherein said mimosa pulp is subject to chlorine-containing bleach.

48. The method of claim 40, wherein said mimosa pulp is subject to non-chlorine bleach.